Schedule 5.3 Part 1 of 2

Schedule 5.3 Title to Assets; Intellectual Property

5.3(a)

- Item 1. of Section (d) of this Schedule 5.3 and Section (e) of this of this Schedule 5.3 are incorporated herein by reference.
- 2. Pursuant to the SGI Japan Ltd. Stockholders' Agreement, SGI Japan Ltd. and NEC have a right to purchase 100% of the shares of SGI Japan Ltd. then currently held by Seller, Silicon Graphics World Trade B.V., Silicon Graphics World Trade Corporation (together, the "SGI Entities") or any other person that, directly or indirectly through one or more intermediaries controls, or is controlled by or is under common control with any such SGI Entity in the event of a direct or indirect sale of all or substantially all of the assets of Seller, upon notification to SGI Japan Ltd. and NEC. SGI Japan Ltd. also has a right of first offer to purchase such shares in the event any stockholder wishes to transfer its shares to anyone other than a permitted transferee.
- Ordinary course encumbrances held by leasing partners of one or more Selling Entities on equipment leased to customers of such Selling Entity(ies) through such leasing partners.
- 4. The items set forth in the table below are in possession of a third person or entity:

Type of Property	Person or Entity in Possession of the Property
Cash Security Deposit - \$920,400	Christensen Holdings, L.P.
Cash Security Deposit - \$1,238	Plaza Partners, L.L.C.
Cash Security Deposit - \$15,390	Ibahn General Holdings Corporation
Utility Deposit - \$139,000 (Mountain View)	PG&E
Utility Deposit - \$77,000 (Sunnyvale)	PG&E
Escrow Account - \$750,000	Wells Fargo Bank
Spare Parts Inventory - Estimated value as of February 20, 2009 is \$17,000,000	UPS Freight Services, Inc.
Spare Parts Inventory - Estimated value as of February 20 2009 is \$8,000,000	DHL Worldwide Express Logistics
Spare Parts Inventory - Estimated value as of February 20, 2009 is \$6,000,000	Pinnacle Data Systems, Inc.
Spare Parts Inventory - Estimated value as of February 20, 2009 is \$200,000	Barco Visual Solutions, LLC
Spare Parts Inventory - Estimated value as of February 20, 2009 is \$100,000	Data Direct networks, Inc
Spare Parts Inventory - Estimated value as of February 20, 2009 is \$200,000	S & C - Mexico City
Spare Parts Inventory - Estimated value as of February 20, 2009 is \$1,200,000	Instrimpex

Type of Property	Person or Entity in Possession of the Property
Manufacturing Inventory - Estimated value as of February 20, 2009 is \$2,000,000	Benchmark Electronics, Inc.

5. The intellectual property set forth below is jointly owned by a third person or entity:

Intellectual Property	Person(s) or Entity(ies) Sharing Joint Ownership
U.S. Copyright – "Advanced RISC computing standards specification"	Jointly owned by Compaq Computer Corporation, Microsoft Corporation, Digital Equipment Corporation, MIPS Computer Systems, Inc., Santa Cruz Operation and Silicon Graphics, Inc.
U.S. Patent – SYSTEM AND METHOD FOR COORDINATING COMMUNICATION BETWEEN LAYERS OF A LAYERED COMMUNICATION SYSTEM, application number 8571366, patent number 5784567, issued 7/21/98	Jointly owned by Silicon Graphics, Inc. and Time- Warner Entertainment Co., L.P.
U.S. Patent – SYSTEM AND METHOD FOR RESOURCE RECOVERY IN A DISTRIBUTED SYSTEM, application number 9547702, patent number 6728895, issued 4/27/04	Jointly owned by Silicon Graphics, Inc. and Time- Warner Entertainment Co., L.P.
U.S. Patent – HIGH PERFORMANCE LOW COST VIDEO GAME SYSTEM WITH COPROCESSOR PROVIDING HIGH SPEED EFFICIENT 3D GRAPHICS AND DIGITAL AUDIO SIGNAL PROCESSING, application number 08561718, patent number 6331856, issued 12/18/01	Jointly owned by Silicon Graphics, Inc. and Nintendo Co.
U.S. Patent – HIGH PERFORMANCE LOW COST VIDEO GAME SYSTEM WITH COPROCESSOR PROVIDING HIGH SPEED EFFICIENT 3D GRAPHICS AND DIGITAL AUDIO SIGNAL PROCESSING, application number 9186137, patent number 6342892, issued 1/29/02	Jointly owned by Silicon Graphics, Inc. and Nintendo Co.
U.S. Patent – HIGH PERFORMANCE LOW COST VIDEO GAME SYSTEM WITH COPROCESSOR PROVIDING HIGH SPEED EFFICIENT 3D GRAPHICS AND DIGITAL AUDIO SIGNAL PROCESSING, application number 10106445, patent number 6593929, issued 7/15/03	Jointly owned by Silicon Graphics, Inc. and Nintendo Co.
AN IMPROVED METHOD AND APPARATUS FOR CLOCKING IN A COMPUTER SYSTEM,	Jointly owned by Silicon Graphics, Inc. and Protocol Engines, Inc.

application number 923086, patent number 5495596, issued 2/27/1996	
U.S. Patent – RESTORATION FILTER FOR TRUNCATED PIXELS, application number 8561584, patent number 5699079, issued 12/16/1997	Jointly owned by Silicon Graphics, Inc. and Nintendo Co.
ANTIALIASING OF SILHOUETTE EDGES, application number 8539956, patent number 5742277, issued 4/21/1998	Jointly owned by Silicon Graphics, Inc. and Nintendo Co.
SYSTEM AND METHOD FOR MERGING PIXEL FRAGMENTS BASED ON DEPTH RANGE VALUES, application number 8562283, patent number 5854631, issued 12/29/1998	Jointly owned by Silicon Graphics, Inc. and Nintendo Co.
SYSTEM AND METHOD FOR PERFORMING ADDRESS TRANSLATION IN A COMPUTER SYSTEM, application number 10835855, patent number 7181589, issued 2/20/2007	Jointly owned by Silicon Graphics, Inc. and University of Utah.
REMOTE CONTROL DESIGN, application number 36927, patent number D398009, issued 9/8/1998	Jointly owned with Scientific-Atlanta, Inc. and MIPs Technologies, Inc.
U.S. Patent – SYSTEM AND METHOD FOR PERFORMING MEMORY OPERATIONS IN A COMPUTING SYSTEM, application number 10836932, patent number 7398359, issued 7/8/08	Jointly owned by Silicon Graphics, Inc. and certain inventors: Miller, Rudolph, Leiserson, Kuszmaul, Asanovic. Massachussetts Institute of Technology may have an interest in this patent.
U.S. Patent – REMOTE CONTROL DESIGN, application number 36927, patent number D398009, issued 9/8/98	Jointly owned with Scientific-Atlanta, Inc. and MIPs Technologies, Inc. No record of assignment from certain inventors on file with U.S. PTO.

5.3(b)

See attached.

5.3 (b):

U.S. Patents and Patent Applications

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
TRANSMISSION LINE WITH FLUID. PERMEABLE JACKET	Issued	7694467	5142100	8/25/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
APPARATUS FOR SHARING MEMORY IN A MULTIPROCESSOR SYSTEM	Issued	7682876	5142638	8/25/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
MP OPTICAL BACKPLANE CONNECTOR SYSTEM	Issued	7556031	5144691	9/1/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD FOR EFFICIENT NON-VIRTUAL. MAIN MEMORY MANAGEMENT	Essued	7572045	5159678	10/27/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
GLOBAL REGISTERS FOR A MULTIPROCESSOR SYSTEM	Essued	7536198	\$165038	11/1/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
AIR JET IMPINGEMENT ON MINIATURE PIN-FIN HEAT SINKS FOR COOLING ELECTRONIC COMPONENTS	Issued	7664940	\$166775	11/24/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DISTRIBUTED ARCHITECTURE FOR INPUT/OUTPUT FOR A MULTIPROCESSOR SYSTEM	Issued	7536182	\$168547	12/1/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR A MULTIPLE REQUEST TOGGLING PRIORITY SYSTEM	Issued	7536417	5168570	12/1/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Frame: 019995/0895
VECTOR BIT-MATRIX MULTIPLY FUNCTIONAL UNIT	Issued	7616736	5170370	12/8/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
DUAL CONTACT BEAM ASSEMBLY FOR AN IC TEST FIXTURE	Issued	7575935	5175496	12/29/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
COMPUTER WITH INTEGRATED HJERARCHICAL REPRESENTATION OF (IHR) OF PROGRAM WHEREIN IHR FILE IS AVAILABLE FOR DEBUGGING AND OPTIMIZING DURING TARGET EXECUTION	Issued	7572043	5175856	12/29/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR A SPECIAL PURPOSE ARITHMETIC BOOLEAN UNIT	Issued	7536197	5175862	12/29/1992	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYNCHRÖNIZED DRAM CONTROL APPARATUS USING TWO DIFFERENT CLOCK RATES	Issued	840654	5179667	1/12/1993	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR CONTROLLING A HIGHLY PARALLEL MULTIPROCESSOR USING AN ANARCHY BASED SCHEDULER FOR	Issued	7537466	5179702	1/12/1993	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD OF FABRICATING METALLIZED CHIP CARRIERS FROM WAFER-SHAPED SUBSTRATES	penssi	7506729	5182420	1/26/1993	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HIGH-DENSITY INTERCONNECT METHOD AND APPARATUS FOR INTEGRATED CIRCUITS.	Issued	7598103	5185502	2/9/1993	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
FAST INTERRUPT MECHANISM FOR INTERRUPTING PROCESSORS IN PARALLEL IN A MULTIPROCESSOR SYSTEM WHEREIN PROCESSORS ARE ASSIGNED PROCESS ID NUMBERS	Issued	7898387	5193187	3/9/1993	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Issue Date Gnreleased Liens/Other Interests	3/9/1993 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	3/16/1993 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	3/23/1993 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	3/23/1993 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	4/13/1993 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	4/13/1993 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Frame: 019995/0895	4/13/1993 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	4/27/1993 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	5/4/1993 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007
Patent No.	5193192	5194710	5196377	5197130	5202970	5202975	5202988	5206952	5208914
Application No.	7571502	7704067	7747523	7459083	7834867	7896895	7571951	7582507	7535786
Status	penssi	Issued	Issued	Issued	Issued	Issued	Issued	Issued	Issued
Title	BUS CONTROL SYSTEM FOR ARBITRATING REQUESTS WITH PREDETERMINED ON/OFF TIME LIMITATIONS	TEMPLATE FOR LASER BONDING	IMPROVED METHOD OF FABRICATING SILICON-BASED CARRIERS	CLUSTER ARCHITECTURE FOR A HIGHLY PARALLEL SCALAR/VECTOR MULTIPROCESSOR SYSTEM	METHOD FOR SHARING MEMORY IN A MULTIPROCESSOR SYSTEM	METHOD FOR OPTIMIZING INSTRUCTION SCHEDULING FOR A PROCESSOR HAVING MULTIPLE FUNCTIONAL RESOURCES	SYSTEM FOR COMMUNICATING AMONG PROCESSORS HAVING DIFFERENT SPEEDS	FAULT TOLERANT C-90 NETWORKING ARCHITECTURE	METHOD AND APPARATUS FOR NON. SEQUENTIAL RESOURCE ACCESS

DIFFERENTIAL CLOCK DISTRIBUTION Issued AND CLOCK SKEW COMPENSATION
Issued

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
APPARATUS FOR CALCULATING DELAY WHEN EXECUTING VECTOR TAILGATING INSTRUCTIONS AND USING DELAY TO FACILITATE SIMULTANEOUS READING OF OPERANDS FROM AND WRITING OF RESULTS TO SAME VECTOR REGISTER	Issued	7683095	5349677	9/20/1994	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reci/Frame: 019995/0895
CLOCK STARTUP STABILIZATION FOR COMPUTER SYSTEMS	Issued	7950628	5355397	10/11/1994	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD OF FABRICATING METALLIZED CHIP CARRIERS FROM WAFER-SHAPED SUBSTRATES	Issued	7884285	5358826	10/25/1994	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recel/Frame: 019995/0895
METHOD OF ACCESSING DATA IN A SHARED RESOURCE REGISTER	penssI	8129437	5367690	11/22/1994	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR SEPARATE MARK AND WAIT INSTRUCTIONS FOR PROCESSORS HAVING MULTIPLE MEMORY PORTS	Issued	8249084	5381536	1/10/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
I/O SUBSYSTEM FOR THE MP	Issued	7807082	5388217	2/7/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
FIBER OPTIC CHANNEL INTERFACE METHOD AND APPARATUS	Issued	7788496	5390041	2/14/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
REAL TIME I/O OPERATION IN A VECTOR PROCESSING COMPUTER SYSTEM BY RUNNING DESIGNATED PROCESSORS IN PRIVILEGED MODE AND BYPASS THE OPERATING SYSTEM	Issued	8200921	5390300	2/14/1995	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liena/Other Interests
RESPONDING TO SERVICE REQUESTS USING MINIMAL SYSTEM-SIDE CONTEXT IN A MULTIPROCESSOR ENVIRONMENT	Issued	8277776	5390329	2/14/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
CONFIGURABLE SPARE MEMORY CHIPS	Issued	8149967	5392292	2/21/1995	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD OF ADJUSTING FOR CLOCK SKEW	Issued	8098503	5414381	5/9/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
REPETITIVE SIGNAL DETECTOR FOR PREVENTING THERMAL RUNAWAY	Issued	8165747	5418481	5/23/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
APPARATUS AND METHOD FOR DETECTING THE ACTIVITIES OF A PLURALITY PROCESSORS ON A SHARED BUS	Issued	924189	5423008	6/6/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR A UNIFIED PARALLEL PROCESSING ARCHITECTURE	Issued	7912964	5428803	6/27/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SCALAR/VECTOR PROCESSOR	Issued	7536409	5430884	7/4/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Frame: 019995/0895
SYSTEM FOR DISTRIBUTED MULTIPROCESSOR COMMUNICATION	Issued	7655296	5434970	7/18/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
BARRIER SYNCHRONIZATION FOR DISTRIBUTED MEMORY MASSIVELY PARALLEL PROCESSING SYSTEMS	Issued	8165265	5434995	7/18/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
OPTICAL CLOCK DISTRIBUTION METHOD AND APPARATUS	Issued	8231996	5442475	8/15/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM HAVING INTEGRATED DISPATCHER FOR SELF SCHEDULING PROCESSORS TO EXECUTE MULTIPLE TYPES OF PROCESSES	Issued	8072655	5452452	9/19/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD FOR ADJUSTING CLOCK SKEW	Issued	8098204	5467040	11/14/1995	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
VECTOR SHIFT FUNCTIONAL UNIT FOR SUCCESSIVELY SHIFTING OPERANDS STORED IN A VECTOR REGISTER BY CORRESPONDING SHIFT COUNTS STORED IN ANOTHER VECTOR REGISTER	Issued	8218997	5481746	1/2/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
BOUNDARY SCAN TESTING USING CLOCKED SIGNAL	Issued	8406571	5487074	1/23/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
AN IMPROVED METHOD AND APPARATUS FOR CLOCKING IN A COMPUTER SYSTEM	penssl	923086	5495596	2/27/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895 Jointly owned with Protocol Engines, Inc.
METHOD AND APPARATUS FOR A MULTIPROCESSOR RESOURCE LOCKOUT INSTRUCTION	Issued	8173923	5499356	3/12/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD OF IMPLEMENTING READ RESOURCES TO MAINTAIN CACHE COHERENCY IN A MULTIPROCESSOR ENVIRONMENT PERMITTING SPLIT TRANSACTIONS	Issued	8128080	5504874	4/2/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Issue Date Unreleased Liens/Other Interests	4/16/1996 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	6/4/1996 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	6/4/1996 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Frame: 019995/0895	6/18/1996 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	7/2/1996 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	7/9/1996 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 RecUFranc: 019995/0895	7/16/1996 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	8/6/1996 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	8/6/1996 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
Patent Issu No.	5509125 4/1	5524250 64	5524255 64	5528735 6/1	2533198 7/2	5535365 7/	5537498 7/1	5544331 8/	5544337 8/
Application No.	8128082 5	363599	8379123 5	8042801	7983979	8141259	8027049	8128720	8487952
Status	Issued	Issued	Issued	Pened	panisi	penssi	penssi	Issued	Issued
Title	SYSTEM AND METHOD FOR FAIR ARBITRATION ON A MULTI-DOMAIN MULTIPROCESSOR BUS	A CENTRAL PROCESSING UNIT FOR PROCESSING A PLURALITY OF THREADS USING DEDICATED GENERAL PURPOSE REGISTERS AND MASQUE REGISTER FOR PROVIDING ACCESS TO THE REGISTERS	METHOD AND APPARATUS FOR ACCESSING GLOBAL REGISTERS IN A MULTIPROCESSOR SYSTEM	METHOD AND APPARATUS FOR DISPLAYING DATA WITHIN A THREE-DIMENSIONAL INFORMATION LANDSCAPE	DIRECTION ORDER PRIORITY ROUTING OF PACKETS BETWEEN NODES IN A NETWORKED SYSTEM	METHOD AND APPARATUS FOR LOCKING SHARED MEMORY LOCATIONS IN MULTIPROCESSING SYSTEMS	OPTICAL CLOCK DISTRIBUTION SYSTEM	SYSTEM AND METHOD FOR GENERATING A READ-MODIFY-WRITE OPERATION	VECTOR PROCESSOR HAVING REGISTERS FOR CONTROL BY VECTOR REGISTERS

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
METHOD AND APPARATUS FOR NAVIGATION WITHIN THREE-DIMENSIONAL INFORMATION LANDSCAPE	Issued	8036113	5555354	9/10/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 ReelFrame: 019995/0895
INTERLEAVED MEMORY ACCESS SYSTEM HAVING VARIABLE-SIZED SEGMENTS LOGICAL ADDRESS SPACES AND MEANS FOR DIVIDING/MAPPING PHYSICAL ADDRESS INTO HIGHER AND LOWER ORDER ADDRESSES	Issued	8248660	5561784	10/1/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DISK DRIVE BRACKET	Issued	8168166	5564804	10/15/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD OF MANAGING DISTRIBUTED MEMORY WITHIN A MASSIVELY PARALLEL PROCESSING SYSTEM	Issued	8166293	5566321	10/15/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
MESSAGING FACILITY WITH HARDWARE TAIL POINTER AND SOFTWARE IMPLEMENTED HEAD POINTER FIFO FOR DISTRIBUTED MEMORY MASSIVELY PARALLEL PROCESSING SYSTEMS	Issued	8166443	5581705	12/3/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM FOR ALLOCATING MESSAGES BETWEEN VIRTUAL CHANNELS TO AVOID DEADLOCK AND TO OPTIMIZE THE AMOUNT OF MESSAGE TRAFFIC ON EACH TYPE OF VIRTUAL CHANNEL	Issued	8165266	5583990	12/10/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD FOR THE DYNAMIC ALLOCATION OF ARRAY SIZES IN MULTIPROCESSOR SYSTEM	Issued	8165379	5586325	12/17/1996	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
COMMUNICATION PROTOCOL FOR TRANSFERRING INFORMATION ACROSS A SERIAL COMMUNICATION LINK	Issued	8407808	5592487	17911771	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Lieus/Other Interests
VECTOR PROCESSOR HAVING FUNCTIONAL UNIT PATHS OF DIFFERING PIPELINE LENGTHS	Issued	8478815	5598547	1/28/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 RecVFrame: 019995/0895
METHOD OF PROCESSING A SEQUENCE OF CONDITIONAL VECTOR IF STATEMENTS	Issued	8484124	5623650	4/22/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
AN EXTENDIBLE CLOCK MECHANISM FOR AN UNIFIED PARALLEL PROCESSING SYSTEM	panssi	8331730	5625831	4/29/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reckliframe: 019995/0895
CACHE COHERENCY USING FLEXIBLE DIRECTORY BIT VECTORS	Penssi	8435463	5634110	2/21/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 ReelFranc: 019995/0895
METHOD AND APPARATUS FOR CHAINING VECTOR INSTRUCTIONS	Issued	8395320	5640524	7661/1/19	Assignee: MORGAN STANLEY & CO., INC., Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
COMPUTER-IMPLEMENTED METHOD AND AN APPARATUS FOR INPUTTING DATA STRUCTURE CHARACTERISTICS	Issued	8478802	5652874	7/29/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SCA DRIVE SLED ASSEMBLY	penssj	592890	5654873	8/5/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR PIGGYBACKING OF READ RESPONSES ON A SHARED MEMORY MULTIPROCESSOR BUS	Issued	8128081	\$655102	8/5/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
VECTOR/SCALAR PROCESSOR WITH SIMULTANEOUS PROCESSING AND INSTRUCTION CACHE FILLING	Issued	8486612	5659706	8/19/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
SYSTEM FOR RANDOMLY MODIFYING VIRTUAL CHANNEL ALLOCATION AND ACCEPTING THE RANDOM MODIFICATION BASED ON THE COST FUNCTION	Issued	8422072	5659796	8/19/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HIGH PERFORMANCE SPIRAL HEAT SINK	parssl	552801	5661638	8/26/1997	Assignce: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
READILY REMOVABLE HEAT SINK ASSEMBLY	Issued	564404	5662163	9/2/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HIERARCHICAL FAT HYPERCUBE ARCHITECTURE FOR PARALLEL PROCESSING SYSTEMS	Issued	8435451	8006995	9/16/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SCAN CHAIN FOR SHIFTING THE STATE OF A PROCESSOR INTO MEMORY AT A SPECIFIED POINT DURING SYSTEM OPERATION FOR TESTING PURPOSES	Issued	567082	\$671235	9/23/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 RecVFrame: 019995/0895
METHOD AND APPARATUS FOR DISPLAYING DATA WITHIN A THREE- DIMENSIONAL INFORMATION LANDSCAPE	Issued	8467620	5671381	9/23/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
POUR-DIMENSIONAL GRAPHICAL USER INTERFACE	Issned	8522953	5678015	10/14/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DIRECTORY BASED COHERENCE PROTOCOL THAT ALLOWS EFFICIENT DROPPING OF CLEAN-EXCLUSIVE DATA	Issued	8435460	5680576	10/21/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DIMM PAIR WITH DATA MEMORY AND STATE MEMORY	Issued	8747976	5686730	11/11/1997	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Unreleased Liens/Other Interests	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895 Jointly owned with Nintendo Co.	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895*	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
Issue Date	11/18/1997	12/2/1997	12/2/1997	12/9/1997	12/16/1997	12/23/1997	1/6/1998	1/20/1998	1/20/1998
Patent No.	5689646	5694028	5694532	5696922	5699079	5701416	5706490	5709263	5710733
Application No.	8541803	8650337	8590561	8165388	8561584	8421566	8484103	551070	589532
Stafus	Issued	Issued	Issued	Issued	Issued	Issued	Issued	Issued	Issued
Trite	CONFIGURING OF NETWORKED SYSTEM TO PERMIT REPLACEMENT OF FAILED NODES AND SELECTION OF ALTERNATE PATHS	METHOD AND APPARATUS FOR ADJUSTING THE POWER SUPPLY VOLTAGE PROVIDED TO MICROPROCESSOR	METHOD FOR SELECTING A THREE- DIMENSIONAL OBJECT FROM A GRAPHICAL USER INTERFACE	RECURSIVE ADDRESS CENTRIFUGE FOR DISTRIBUTED MEMORY MASSIVELY PARALLEL PROCESSING SYSTEMS	RESTORATION FILTER FOR TRUNCATED PIXELS	ADAPTIVE ROUTING MECHANISM FOR TORUS INTERCONNECTION NETWORK	METHOD OF PROCESSING CONDITIONAL BRANCH INSTRUCTIONS IN SCALAR/VECTOR PROCESSOR	HIGH PERFORMANCE SINUSOIDAL HEAT SINK REMOVAL FROM ELECTRONIC EQUIPMENT	PROCESSOR-INCLUSIVE MEMORY MODULE

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
DATA PROCESSING SYSTEM FOR PROCESSING ONE AND TWO PARCEL INSTRUCTIONS	Issued	8481060	5717881	2/10/1998	Assignce: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ASSOCIATIVE SCALAR DATA CACHE WITH WRITE-THROUGH CAPABILITIES FOR A VECTOR PROCESSOR	Issued	8348056	5717895	2/10/1998	Assignce: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
PROGRAMMABLE DISTRIBUTED NETWORK ROUTING	Issued	8435452	5721819	2/24/1998	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
BARRIER AND EUREKA SYNCHRONIZATION ARCHITECTURE FOR MULTIPROCESSORS	Issued	8450251	5721921	2/24/1998	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD TO REDUCE PHASE OFFSET AND PHASE JITTER IN PHASE-LOCKED AND DELAY-LOCKED LOOPS USING SELF BIASED CIRCUITS	Issued	8592736	5727037	3/10/1998	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
APPARATUS AND METHOD FOR PAGE MIGRATION IN A NON-UNIFORM MEMORY ACCESS (NUMA) SYSTEM	Issued	8766363	5727150	3/10/1998	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
COMPRESSION CONNECTOR	Issued	713283	5730605	3/24/1998	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD FOR SEEDING A PSEUDO- RANDOM NUMBER GENERATOR WITH A CRYPTOGRAPHIC HASH OF A DIGITIZATION OF A CHAOTIC SYSTEM	Issued	592891	5732138	3/24/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HEAT SINK WITH INTEGRAL ATTACHMENT MECHANISM	pensel	649769	5735340	4/7/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
MULTIPROCESSOR COMPUTER SYSTEM WITH INTERLEAVED PROCESSING ELEMENT NODES	Issued	8662868	5737628	4/7/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ANTIALIASING OF SILHOUETTE EDGES	Issued	8539956	5742277	4/21/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
PARTITIONED ADDRESSING APPARATUS FOR VECTOR/SCALAR REGISTERS	Issued	8485017	5745721	4/28/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ADAPTIVE CONGESTION CONTROL MECHANISM FOR MODULAR COMPUTER NETWORKS	Issued	8615700	5748900	\$/5/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
PROCEDURE AND SYSTEM FOR PLACEMENT OPTIMIZATION OF CELLS WITHIN CIRCUIT BLOCKS BY OPTIMIZING PLACEMENT OF INPUT/OUTPUT PORTS WITHIN AN INTEGRATED CIRCUIT DESIGN	Issued	611785	5757658	5/26/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DAUGHTER CARD ASSEMBLY	Issued	8604839	5761043	6/2/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
A SYSTEM FOR ARBITRATING PACKETIZED DATA FROM THE NETWORK TO THE PERIPHERAL RESOURCES AND PRIORITIZING THE DISPATCHING OF PACKETS ONTO THE NETWORK	Issued	8650630	5761534	6/2/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
STREAM BUFFERS FOR HIGH. PERFORMANCE COMPUTER MEMORY SYSTEMS	Issued	8333133	5761706	8661/2/9	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Frame: 019995/0895

Title	Status	Application No.	No.	Issue Date	Unreleased Liens/Other Interests
SYSTEM AND METHOD OF ADDRESSING DISTRIBUTED MEMORY WITHIN A MASSIVELY PARALLEL PROCESSING SYSTEM	Issued	8165118	5765181	86617679	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
TRANSPARENT RELOCATION OF REAL MEMORY ADDRESSES IN THE MAIN MEMORY OF A DATA PROCESSOR	Issued	8595528	5765198	8661/6/9	Assignee: MORGAN STANLEY & CO., INC. Brief, SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
COOLING APPROACH FOR HIGH POWER INTEGRATED CIRCUITS MOUNTED ON PRINTED CIRCUIT BOARDS	Issued	8605355	5768104	8/1/9/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
A SYSTEM AND METHOD FOR THE SYNCHRONOUS TRANSMISSION OF DATA IN A COMMUNICATION NETWORK UTILIZING A SOURCE CLOCK SIGNAL TO LATCH SERIAL DATA INTO PIRST REGISTERS AND A HANDSHAKE SIGNAL TO LATCH PARALLEL DATA INTO SECOND REGISTERS	penss	8435453	5768529	8/16/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
BULK HEAD GASKET ASSEMBLY	penss	697073	5770822	6/23/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
APPARATUS AND METHOD FOR DYNAMIC CENTRAL PROCESSING UNIT CLOCK ADJUSTMENT	Penssi	105889	5774704	6/30/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR COORDINATING COMMUNICATION BETWEEN LAYERS OF A LAYERED COMMUNICATION SYSTEM	Issued	8571366	5784567	7/21/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895 Jointly owned with Time-Warner Entertainment Co. T.P.

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
GUARANTEED BANDWIDTH ALLOCATION METHOD IN A COMPUTER SYSTEM FOR INPUT/OUTPUT DATA TRANSFERS	Issued	717581	5784569	7/21/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
VIRTUAL TO LOGICAL TO PHYSICAL ADDRESS TRANSLATION FOR DISTRIBUTED MEMORY MASSIVELY PARALLEL PROCESSING SYSTEMS	Issued	8165814	5784706	7/21/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR MAINTAINING COHERENCY OF VIRTUAL-TO-PHYSICAL MEMORY TRANSLATIONS IN A MULTIPROCESSOR COMPUTER	Issued	8435459	5787476	7/28/1998	Assignee: MORGAN STANLEY & CO., INC., Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DISK DRIVE LOADING MECHANISM	Issued	713601	5790373	8/4/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HIGH MEMORY CAPACITY DIMM WITH DATA AND STATE MEMORY	penssi	8747975	5790447	8/4/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD TO REDUCE JITTER IN DIGITAL DELAY-LOCKED LOOPS	Issued	8609068	5790612	8/4/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
NETWORKED MULTIPROCESSOR SYSTEM WITH GLOBAL DISTRIBUTED MEMORY AND BLOCK TRANSFER ENGINE	Issued	8661908	5797035	8/18/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR COOLING DAUGHTER CARD MODULES	Issued	8604888	5801924	9/1/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD FOR THE DYNAMIC ALLOCATION OF PAGE SIZES IN VIRTUAL MEMORY	Issued	8166451	5802341	9/1/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	- Application No.	No.	Issue Date	Unreleased Liens/Other Interests
COOLING CAP METHOD AND APPARATUS FOR TAB PACKAGED INTEGRATED CIRCUITS	Issued	8604918	5805418	8661/8/6	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recel/Frame: 019995/0895
RAID-S PARITY GENERATION AND DATA RECONSTRUCTION	Issued	8650336	5805788	8661/8/6	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
MULTI-CONFIGURABLE PUSH- PULL/OPEN-DRAIN DRIVER CIRCUIT	Issued	8638186	5811997	9/22/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
INSTRUCTION METHODS FOR PERFORMING DATA FORMATTING WHILE MOVING DATA BETWEEN MEMORY AND A VECTOR REGISTER FILE	penssj	716972	5812147	9/22/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
RAID SYSTEM WITH FIBRE CHANNEL ARBITRATED LOOP	Issued	8718743	5812754	9/22/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR ADDRESS SPACE TRANSLATION USING A TLB	Issued	712889	5815686	9/29/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
POWER SWITCH PLUNGER MECHANISM	Essued	794195	5817997	10/6/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 ReeJ/Frame: 019995/0895
APPARATUS AND METHOD FOR DETERMINING THE SPEED OF A SEMICONDUCTOR CHIP	Essued	675849	5818250	10/6/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Frame: 019995/0895
COLLABORATIVE WORK ENVIRONMENT SUPPORTING THREE- DIMENSIONAL OBJECTS AND MULTIPLE, REMOTE PARTICIPANTS	Issued	8590562	5821925	10/13/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
DISTRIBUTED GLOBAL CLOCK SYSTEM	Issued	8435455	5822381	10/13/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
CIRCUIT FOR FILTERING A POWER SUPPLY FOR NOISE SENSITIVE DEVICES	Issued	788369	5825238	10/20/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ROTARY LATCH ASSEMBLY FOR A COMPUTER HOUSING	Issued	815636	5826922	10/27/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HEATSINK AND METHOD OF FORMING A HEATSINK	Issued	520408	5829512	11/3/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ACKNOWLEDGE TRIGGERED FORWARDING OF EXTERNAL BLOCK DATA RESPONSES IN A MICROPROCESSOR	Issued	8544537	5832306	11/3/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ARRANGEMENT FOR MODIFYING ELECTRICAL PRINTED CIRCUIT BOARDS	Issued	205990	5834705	11/10/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
MECHANISM FOR NON-LINEAR BROWSING OF DIVERSE INFORMATION SOURCES	penss	629967	5835092	11/10/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
USING EXTERNAL REGISTERS TO EXTEND MEMORY REFERENCE CAPABILITIES OF A MICROPROCESSOR	Issued	8615671	5835925	11/10/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
MESSAGING IN DISTRIBUTED MEMORY MULTIPROCESSING SYSTEM HAVING SHELL CIRCUITRY FOR ATOMIC CONTROL OF MESSAGE STORAGE QUEUES TAIL POINTER STRUCTURE IN LOCAL MEMORY	Issued	8615694	5841973	11/24/1998	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Date Unreleased Liens/Other Interests	1998 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	H998 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895			1999 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	1999 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Framc: 019995/0895	1999 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Real/frame: 0.00905/0805
Issue Date	12/8/1998	12/15/1998	12/29/1998	1/19/1999	1/19/1999	6661/61/1	1/26/1999	2/2/1999
Patent No.	5848286	5848906	5854631	5861885	5861891	5862313	5864738	5867419
Application No.	8521566	796302	8562283	8896538	8782809	8650632	8614859	903042
Status	Issued	Issued	Issued	Issued	Issued	Issued	Issued	Issued
Dide	VECTOR WORD SHIFT BY VO SHIFT COUNT IN VECTOR SUPERCOMPUTER PROCESSOR	LOADING AND PLACEMENT DEVICE FOR CONNECTING CIRCUIT BOARDS	SYSTEM AND METHOD FOR MERGING PIXEL FRAGMENTS BASED ON DEPTH RANGE VALUES	METHOD AND APPARATUS FOR INDICATING SELECTED OBJECTS BY SPOTLIGHT	METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR VISUALLY APPROXIMATING SCATTERED DATA	A RAID SYSTEM USING I/O BUFFER SEGMENT TO TEMPORARY STORE STRIPED AND PARITY DATA AND CONNECTING ALL DISK DRIVES VIA A SINGLE TIME MULTIPLEXED NETWORK	MASSIVELY PARALLEL PROCESSING SYSTEM USING TWO DATA PATHS: ONE CONNECTING ROUTER CIRCUIT TO THE INTERCONNECT NETWORK AND THE OTHER CONNECTING ROUTER CIRCUIT TO I/O CONTROLLER	PROCESSOR-INCLUSIVE MEMORY MODULE

Tide	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
MEMORY SYSTEM WITH MULTIPLE ADDRESSING AND CONTROL BUSSES	Issued	060451	5870325	2/9/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
RESUMPTION OF PREEMPTED NON- PRIVILEGED THREADS WITH NO KERNEL INTERVENTION	Issued	8800088	5872963	2/16/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
A METHOD TO PIPELINE WRITE MISSES IN SHARED CACHE MULTIPROCESSOR SYSTEMS	Issued	708298	5875468	2/23/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ELECTROMAGNETIC INTERFERENCE SHIELDING ENCLOSURE AND HEAT SINK WITH COMPRESSION COUPLING MECHANISM	Issued	878708	5880930	3/9/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR GENERATING AND DISPLAYING COMPLEX GRAPHIC IMAGES AT A CONSTANT FRAME RATE	Issued	8620215	5889529	3/30/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
RESILIENT PANEL FOR HOUSING A MACHINE	Issued	8716928	2897180	4/27/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR REMOVING POWER OF TWO RESTRICTIONS ON DISTRIBUTED ADDRESSING	Penssi	8673436	5900023	5/4/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
LATCHING ASSEMBLY FOR A COMPUTER	Issued	966611	2907962	6/1/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895"
INTERLEAVING MEMORY IN DISTRIBUTED VECTOR ARCHITECTURE MULTIPROCESSOR SYSTEM	Issued	8987948	5913069	6/15/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

HIGH BANDWIDTH PCI TO PACKET SWITCHED ROUTER BRIDGE HAVING MINIMIZED MEMORY LATENCY SYSTEM AND METHOD FOR DISTRIBUTED MULTIPROCESSOR COMMUNICATIONS	Issued lessed	Application No. 780781 8927507	Patent No. 5915104 5920714	Issue Date 6/22/1999 7/6/1999	Unreleased Liens/Other Interests Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SLIDING DOOR ASSEMBLY FOR A COMPUTER HOUSING	Issued	940273	5924780	7/20/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
LOW-LATENCY REAL-TIME DISPATCHING IN GENERAL PURPOSE MULTIPROCESSOR SYSTEMS	Penssi	8752925	5928322	9661/127/1	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR VISUALIZING AN EVIDENCE CLASSIFIER	Issued	8841341	5930803	9661/12/1	Assignee: MORGAN STANLEY & CO., INC., Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR BUFFERING MULTIPLE FRAMES WHILE CONTROLLING LATENCY	Issued	8743883	5933155	8/3/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DENSITY DEPENDENT VECTOR MASK OPERATION CONTROL APPARATUS AND METHOD	Issued	8706808	5940625	8/17/18	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DISTRIBUTED VECTOR ARCHITECTURE	Issued	8988524	5946496	8/31/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
CABLE MANAGEMENT SYSTEM FOR A COMPUTER	Issued	8717988	5957556	9/28/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
ADAPTIVE CONGESTION CONTROL MECHANISM FOR MODULAR COMPUTER NETWORKS	Issued	8935667	5958017	9/28/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR A DYNAMICALLY SIZING HASH TABLES	Issued	8938672	5960434	9/28/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR COMPUTING HISTOGRAM AGGREGATIONS	Issued	8815473	5960435	9/28/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
COOLING CAP METHOD AND APPARATUS FOR TAB PACKAGED INTEGRATED CIRCUITS	Issued	9136908	5963428	10/5/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR SCHEDULING AN EVENT SUBJECT TO THE AVAILABILITY OF REQUESTED PARTICIPANTS	Issued	8807551	5963913	10/5/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
UNCACHED ACCELERATED BUFFER IN A MICROPROCESSOR	Issued	8539524	5963981	10/5/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
INTEGRAL ACTUATOR FOR A PRINTED CIRCUIT BOARD	Issued	8911909	5967825	10/19/1999	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ROUTER TABLE LOOKUP MECHANISM	Issued	8971587	5970232	10/19/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR INPUT/OUTPUT FLOW CONTROL IN A MULTIPROCESSOR COMPUTER SYSTEM	Issued	8892879	5974456	10/26/1999	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Tide	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR PROFILING THREAD VIRTUAL MEMORY ACCESSES	Issued	8911192	5974536	10/26/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
AUTOMATIC FRAME ACCUMULATOR	Issued	09153273	5977965	6661/2/11	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
INTERACTIVE SELECTION OF 3-D ON- SCREEN OBJECTS USING ACTIVE SELECTION ENTITIES PROVIDED TO THE USER	Issued	8747939	5982382	11/9/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
PRECISE DETECTION OF ERRORS USING HARDWARE WATCHPOINT MECHANISM	Issued	8920177	5987626	11/16/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND SYSTEM FOR SIMULTANEOUS HIGH BANDWIDTH INPUT OUTPUT	Issued	796129	5991824	11/23/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR MULTIPROCESSOR PARTITIONING TO SUPPORT HIGH AVAILABILITY	Issued	8435462	5991895	11/23/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR CODING COLORS AND STORING COMPENSATION FACTORS USED IN COLOR SPACE CONVERSION	Issued	9093608	5995655	11/30/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
PROCESSOR-INCLUSIVE MEMORY MODULE	Issued	789557	5999437	12/7/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD OF PERFORMING TOMOGRAPHIC RECONSTRUCTION AND VOLUME RENDERING USING TEXTURE MAPPING	Issued	8499614	6002738	12/14/1999	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
POROUS METAL HEAT SINK	Issued	8971179	6018459	1/25/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR SELECTION OF IMPORTANT ATTRIBUTE	penssi	8866314	6026399	2/15/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR EXTENDING MEMORY REFERENCE CAPABILITIES OF A MICROPROCESSOR	penss	9006449	6029212	2/22/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recel/Frame: 019995/0895
INTERPOLATION BETWEEN RELATIONAL TABLES FOR PURPOSES OF ANIMATING A DATA VISUALIZATION	Issued	8987242	6034697	3.77.2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
IMPROVED HOT-PLUG POWER SUPPLY FOR HIGH-AVAILABILITY COMPUTER SYSTEMS	Issued	985562	6044424	3/28/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HIGH MEMORY CAPACITY DIMM WITH DATA AND STATE MEMORY	Issued	9126944	6049476	4/11/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
A METHOD AND SYSTEM FOR AN EFFICIENT USER MODE CACHE MANIPULATION USING A SIMULATED INSTRUCTION	Issued	709005	6049866	4/11/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
LARGE AREA, MULTI-DEVICE HEAT PIPE FOR STACKED MCM-BASED SYSTEMS	Issued	9056037	6055157	4/25/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DISTRIBUTED CONTROL AND SYNCHRONIZATION OF MULTIPLE DATA PROCESSORS USING FLEXIBLE COMMAND QUEUES (AS AMENDED)	Issued	8971261	6055579	4/25/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Unreleased Liens/Other Interests	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
Unre	Assignee: N Brief: SEC Recorded: Reel/Frame	Assignee: MORGAN 8 Brief: SECURITY AC Recorded: 10/18/2007 Reel/Frame: 019995/0	Assignee: N Brief: SEC Recorded: Reel/Frame	Assignce: N Brief: SEC Recorded: Reel/Frame	Assignee: N Brief: SEC Recorded: Reel/Frame				
Issue Date	4/25/2000	5/16/2000	5/23/2000	6/13/2000	6/20/2000	6/27/2000	7/4/2000	7/18/2000	7/18/2000
Patent No.	6055618	6065084	6067411	6075543	6078515	6081882	6085303	6091155	6092226
Application No.	8550992	8775834	08718765	9217193	09196624	10772010	8972010	08606291	9021651
Status	Issued	Issued	Issued	Issued	penss	lssued	Issued	Issued	penssi
Title	VIRTUAL MAINTENANCE NETWORK IN MULTIPROCESSING SYSTEM HAVING A HIGH PRIORITY NON-FLOW CONTROLLED VIRTUAL MAINTENANCE CHANNEL	PROGRAMMABLE PACKER AND UNPACKER WITH DITHERER	ADAPTIVE FREQUENCY SYNTHESIZER WITH SYNCHRONIZATION	SYSTEM AND METHOD FOR BUFFERING MULTIPLE FRAMES WHILE CONTROLLING LATENCY	MEMORY SYSTEM WITH ADDRESSING AND CONTROL BUSSES	QUANTUM ACCELERATION OF CONVENTIONAL NON-QUANTUM COMPUTERS	SERIALIZED, RACE-FREE VIRTUAL BARRIER NETWORK	BGA LAND PATTERN	THE FABRICATION OF TEST LOGIC FOR LEVEL SENSITIVE SCAN ON A CIRCUIT

e Unreleased Liens/Other Interests	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895			Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
Issue Date	8/1/2000	8/8/2000	8/15/2000	8/22/2000	8/29/2000	8/29/2000	8/29/2000	9/5/2000
Patent No.	6098162	6101181	6105113	6108722	6111578	6112285	6112286	6115278
Application No.	9138613	8971591	8915912	713602	8845465	8935819	8933998	09247256
Status	Issued	Issued	Issued	penss	Issued	Issued	Issued	Issued
Title	VECTOR SHIFT FUNCTIONAL UNIT FOR SUCCESSIVELY SHIFTING OPERANDS STORED IN A VECTOR REGISTER BY CORRESPONDING SHIFT COUNTS STORED IN ANOTHER VECTOR REGISTER.	VIRTUAL CHANNEL ASSIGNMENT IN LARGE TORUS SYSTEMS	SYSTEM AND METHOD FOR MAINTAINING TRANSLATION LOOK- ASIDE BUFFER (TLB) CONSISTENCY	DIRECT MEMORY ACCESS APPARATUS FOR TRANSFERING A BLOCK OF DATA HAVING DISCONTINUOUS ADDRESSES USING AN ADDRESS CALCULATING CIRCUIT	METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR NAVIGATING THROUGH PARTIAL HIERARCHIES	METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR VIRTUAL MEMORY SUPPORT FOR MANAGING TRANSLATION LOOK ASIDE BUFFERS WITH MULTIPLE PAGE SIZE SUPPORT	SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR REVERSE MAPPING MEMORY TO DATA STRUCTURE REFERENCES	MEMORY SYSTEM WITH SWITCHING FOR DATA ISOLATION

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Lieus/Other Interests
SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR DISTRIBUTING PAGE CACHES	Issued	8921257	6115790	9/5/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
STOP ALIGN LATERAL MODULE TO MODULE INTERCONNECT	Essued	8927359	6116913	9/12/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
RECURSIVE ADDRESS CENTRIFUGE FOR DISTRIBUTED MEMORY MASSIVELY PARALLEL PROCESSING SYSTEMS	Issued	8889251	6119198	9/12/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ARRAY ADDRESS AND LOOP ALIGNMENT CALCULATIONS	Issued	9174862	6128639	10/3/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ADVANCED BOOT SEQUENCE FOR AN X86 COMPUTER SYSTEM THAT MAINTAINS EXPANSION CARD DEVICE COMPATIBILITY	Issued	9699216	6128731	10/3/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DOOR ASSEMBLY FOR A COMPUTER	Issued	09372660	6132019	10/17/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR VISUALIZING DATA USING PARTIAL HIERARCHIES	Issued	8813347	6137499	10/24/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DEMATEABLE, COMPLIANT, AREA ARRAY INTERCONNECT	Essued	8934973	6142789	11/7/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR INTER-CELL PAGE SHARING IN A DISTRIBUTED SHARED MEMORY SYSTEM	Issued	8933999	6148379	11/14/2000	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

ate Unreleased Liens/Other Interests	O00 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Ness		Massignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895		NOI Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Trame: 019995/0895	001 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	001 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
Issue Date	12/26/2000	1/2/2001	1/2/2001	1/9/2001	1/9/2001	1/9/2001	1/9/2001	1/30/2001	1/30/2001
Patent No.	6167437	6167947	6169659	6171120	6172874	6173322	6173428	6181231	6182058
Application No.	8921545	9215531	09498939	09005219	9055677	08866247	8340238	9055554	8810217
Status	Issued	Issued	Issued	Issued	Issued	Issued	Issued	Issued	Issued
Title	METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR PAGE REPLICATION IN A NON-UNIFORM MEMORY ACCESS SYSTEM	HIGH PERFORMANCE GAS COOLING SYSTEM AND METHOD	METERED FORCE SINGLE POINT HEATSINK ATTACH MECHANISM	MODULAR CARD CAGE WITH CONNECTION MECHANISM	SYSTEM AND METHOD FOR STACKING OF INTEGRATED CIRCUIT PACKAGES	NETWORK REQUEST DISTRIBUTION BASED ON STATIC RULES AND DYNAMIC PERFORMANCE DATA	APPARATUS AND METHOD FOR TESTING USING A CLOCKED TEST ACCESS PORT CONTROLLER FOR LEVEL SENSITIVE SCAN DESIGNS	DIAMOND-BASED TRANSFORMERS AND POWER CONVERTORS	NB-TREE CLASSIFIER

ite Unreleased Liens/Other Interests	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reck/Frame: 019995/0895		01 Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895		01 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	01 Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recolf-name: 019994/0894
Issue Date	1/30/2001	1/30/2001	2/2/2/2001	2/27/2001	3/20/2001	3/27/2001	4/10/2001	4/10/2001
Patent No.	6182089	6182195	6193532	6195676	6205119	6208361	6215686	6216174
Application No.	8935820	9123473	9408969	8003000	8931565	9097601	09384471	9162673
Status	Issued	penss	Issued	Issued	Issued	Issued	Issued	Issued
Tide	METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR DYNAMICALLY ALLOCATING LARGE MEMORY PAGES OF DIFFERENT SIZES	SYSTEM AND METHOD FOR MAINTAINING COHERENCY OF VIRTUAL-TO-PHYSICAL MEMORY TRANSLATIONS IN A MULTIPROCESSOR COMPUTER	PRINTED CIRCUIT BOARD CARRIER INSERTION/EXTRACTION ASSEMBLY	METHOD AND APPARATUS FOR USER SIDE SCHEDULING IN A MULTIPROCESSOR OPERATING SYSTEM PROGRAM THAT IMPLEMENTS DISTRIBUTIVE SCHEDULING OF PROCESSES	ADAPTIVE BANDWIDTH SHARING	METHOD AND SYSTEM FOR EFFICIENT CONTEXT SWITCHING IN A COMPUTER GRAPHICS SYSTEM	MEMORY SYSTEM WITH SWITCHING FOR DATA ISOLATION	SYSTEM AND METHOD FOR FAST BARRIER SYNCHRONIZATION

Tide	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
COLLABORATIVE WORK ENVIRONMENT SUPPORTING THREE. DIMENSIONAL OBJECTS AND MULTIPLE, REMOTE PARTICIPANTS	Issued	9169938	6219057	4/17/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD FOR EFFICIENT TRANSLATION OF MEMORY ADDRESSES IN COMPUTER SYSTEMS	Issued	09294830	6223370	4/24/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
EIGEN-MODE ENCODING OF SIGNALS IN A DATA GROUP	Essued	9118158	6226330	5/1/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HYBRID HYPERCUBE/TORUS ARCHITECTURE	Issued	8971588	6230252	5/8/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HASHED DIRECT-MAPPED TEXTURE CACHE	Essued	9111346	6233647	5/15/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
RECONFIGURABLE RING-BASED NETWORK SYSTEM	Issued	8614860	6233704	5/15/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR ALLOCATING PHYSICAL MEMORY IN A DISTRIBUTED SHARED MEMORY NETWORK	Issued	8933829	6249802	6/19/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DESIGN FOR CIRCUIT BOARD ORTHOGONAL INSTALLATION AND REMOVAL	Issued	09346659	6256196	7/3/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
MESSAGE BUFFERING FOR A COMPUTER-BASED NETWORK	Issued	8991233	6256677	7/3/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR VISUALIZING DATA USING PARTIAL HIERARCHIES	Issued	8845426	6259451	7/10/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
MEDIA CO-PROCESSOR WITH GRAPHICS, VIDEO AND AUDIO TASKS PARTITIONED BY TIME DIVISION MULTIPLEXING	Issued	09137017	6275239	8/14/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Frame: 019995/0895
METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR VISUALIZING A DECISION-TREE CLASSIFIER	Issued	8813336	6278464	8/21/2001	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 RecUFrame: 019995/0895
OPERATING SYSTEM HAVING A MECHANISM FOR HANDLING A GROUP OF RELATED PROCESSES RESIDING ON SEPARATE MACHINES	Issued	08569463	6279028	8/21/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 RecUFrame: 019995/0895
CONFIGURABLE SYNCHRONIZER FOR DOUBLE DATA RATE SYNCHRONOUS DYNAMIC RANDOM ACCESS MEMORY	Penssi	9410137	6279073	8/21/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Frame: 019995/0895
CABLE DOCK FIXTURE WITH EMI SHIELDING	Issued	09478968	6280257	8/28/2001	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD TO PROVIDE POWER TO A SEA OF GATES STANDARD CELL BLOCK FROM AN OVERHEAD BUMP GRID	Issued	9418597	6281108	8/28/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
PACKETIZED DATA TRANSMISSIONS IN A SWITCHED ROUTER ARCHITECTURE	Issued	8780785	6282195	8/28/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
MATRIX PROCESSOR SYSTEM	Issued	7710146	6282583	8/28/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recl/Prame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR DEFINING INITIAL PROGRAM MEMORY PLACEMENT IN A NON- UNIFORM MEMORY ACCESS SYSTEM	Issued	8933833	6289424	9/11/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ELECTRICAL CONNECTOR WITH LATCHING BACKPLATE ASSEMBLY	Issued	9608935	6293813	9/25/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR VISUALIZING A DATA STRUCTURE	Essued	9175318	6301579	10/3/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
AIR OR LIQUID COOLED COMPUTER MODULE COLD PLATE	Essued	8604841	6305463	10/23/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR PROCESSING A SET OF DATA VALUES WITH PLURAL PROCESSING UNITS MASK BITS GENERATED BY OTHER PROCESSING UNITS	Issued	9103201	6308250	10/23/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ACOUSTIC PERSPECTIVE IN A VIRTUAL THREE-DIMENSIONAL ENVIRONMENT	Issued	8895264	6330486	12/11/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HIGH PERFORMANCE LOW COST VIDEO GAME SYSTEM WITH COPROCESSOR PROVIDING HIGH SPEED EFFICIENT 3D GRAPHICS AND DIGITAL AUDIO SIGNAL PROCESSING	panssj	08561718	6331856	12/18/2001	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR MANAGING MEMORY IN A NON-UNIFORM MEMORY ACCESS SYSTEM	bsued	9417348	6336177	1/1/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Unreleased Liens/Other Interests	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895 Jointly owned with Nintendo Co.	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Franc: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 ReeUFrame: 019995/0895	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
Issue Date	1/15/2002	1/29/2002	2/12/2002	3/5/2002	3/5/2002	3/12/2002	4/2/2002	4/16/2002
Patent No.	6339812	6342892	6345515	6353844	6353917	6357003	6366461	6373483
Application No.	9410139	9186137	9642957	8773486	09387934	09176694	9408772	9302954
Status	Penssi	penss	Issued	Issued	Issued	Issued	Issued	Issued
Title	METHOD AND APPARATUS FOR HANDLING INVALIDATION REQUESTS TO PROCESSORS NOT PRESENT IN A COMPUTER SYSTEM	VIDEO GAME SYSTEM AND COPROCESSOR FOR VIDEO GAME SYSTEM	CONDITIONING AND FILLING SYSTEM FOR A SPRAY EVAPORATIVE COOLING WORKING FLUID	GUARANTEEING COMPLETION TIMES FOR BATCH JOBS WITHOUT STATIC PARTITIONING	DETERMINING A WORST CASE SWITCHING FACTOR FOR INTEGRATED CIRCUIT DESIGN	ADVANCED FIRMWARE BOOT SEQUENCE X86 COMPUTER SYSTEM THAT MAINTAINS LEGACY HARDWARE AND SOFTWARE COMPATIBILIRTY	SYSTEM AND METHOD FOR COOLING ELECTRONIC COMPONENTS	METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR VISUALLY APPROXIMATING SCATTERED DATA USING COLOR TO REPRESENT VALUES OF A CATEGORICAL VARIABLE

Titie	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
CARRIER FOR COMPUTER PERIPHERAL DEVICE	Essued	9475469	6381139	4/30/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR SHARED MEMORY PROTECTION IN A MULTIPROCESSOR COMPUTER	Issued	9410120	6381681	4/30/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
OPTIMIZING REPEATERS POSITIONING ALONG INTERCONNECTS (THIS IS THE SECOND APPLICATION FILED FROM 610.00)	Issued	09388938	1856819	5/14/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND DEVICE FOR CONTROLLING ACCESS TO MEMORY	Issued	9270613	6393533	\$/21/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR ANALYZING BUFFER ALLOCATION TO A DEVICE ON A PERIPHERAL COMPONENT INTERCONNECT BUS	Issued	9409765	6397274	5/28/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
MODULAR AIR MOVING SYSTEM AND METHOD	Issued	9408769	6406257	6/18/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
A PROGRAMMABLE DIFFERENTIAL DELAY CIRCUIT WITH FINE DELAY ADJUSTMENT	Issued	9475466	6417713	7/9/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR FINDING PREEMPTED THREADS IN A MULTI- THREADED APPLICATION	Issued	8802802	6418460	7/9/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR BROADCASTING INVALIDATION MESSAGES IN A COMPUTER SYSTEM	Issued	9356106	6421712	7/16/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
FASTENERLESS CIRCUIT BOARD SUPPORT	Issued	9608981	6428352	8/6/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HEAT SINK ATTACHMENT CLIP	Issued	9620335	6434007	8/13/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
CABLE ORGANIZER AND METHOD	Issued	9475812	6438309	8/20/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR GENERATING CLOCK SIGNALS	Issued	9620336	6441666	8/27/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
COMPUTER MODULE MOUNTING SYSTEM AND METHOD	Issued	9408148	6452805	9/17/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR MEMORY PAGE MIGRATION IN A MULTI- PROCESSOR COMPUTER	Issued	9409606	6453408	9/17/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR PROCESSING ERRORS IN A COMPUTER SYSTEM	penssj	9409764	6457146	9/24/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR VISUALIZING AN EVIDENCE CLASSIFIER	Issued	9218445	6460049	10/1/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR PREPARING A PERSPECTIVE VIEW OF AN APPROXIMATELY SPHERICAL SURFACE PORTION	Issued	9452322	6476813	11/5/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Stafus	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
COMPUTER-RELATED METHOD. SYSTEM AND PROGRAM PRODUCT FOR CONTROLLING DATA VISUALIZATION IN EXTERNAL DIMENSIONS	pensal	8748548	6480194	11/12/2002	Assignee: GENERAL ELECTRIC CAPITAL CORP. Brief: SECURITY AGREEMENT Date Recorded: Oct 24, 2006 Reel/Frame: 018545/0777 An assignment of GE's security interest to Morgan Stanley appears to be incorrectly recorded on U.S. Patent No. 6780194 instead of this U.S. Patent No. 6480194.
SPACIAL DERIVATIVE BUS ENCODER AND DECODER	Issued	8971185	6480548	11/12/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
PANEL GASKET	Issued	9608378	6483024	11/19/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
BAFFLE SYSTEM FOR AIR COOLED COMPUTER ASSEMBLY	Issued	9619818	6483699	11/19/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
A PROGRAMMABLE DIFFERENTIAL DELAY CIRCUIT WITH FINE DELAY ADJUSTMENT	Issued	10142472	6486723	11/26/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SUB RACK BASED VERTICAL HOUSING FOR COMPUTER SYSTEMS	Issued	09955562	6487080	11/26/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 12/16/2008 Reel/Frame: 021985/0269
PRINTED CIRCUIT BOARD COMPONENT PACKAGING	Essued	9620059	6487082	11/26/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR MINIMIZING ERROR CORRECTION CODE BITS IN VARIABLE SIZED DATA FORMATS	Issued	9409607	6487685	11/26/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Tide	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
SYSTEM AND METHOD FOR ACCURATE ADJUSTMENT OF DISCRETE INTEGRATED CIRCUIT DELAY LINES	Issued	9620683	6496048	12/17/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND ASSEMBLY FOR INSTALLATION OR REMOVAL OF PRINTED CIRCUIT CARD	Issued	9408657	6496385	12/17/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD FOR MANAGING CONCURRENT ACCESS TO VIRTUAL MEMORY DATA STRUCTURES	Issued	9287592	6496909	12/17/2002	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
PRINTED CIRCUIT BOARD STIFFENER	Issued	9619725	6512676	1/28/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ELECTRONIC DEVICE SUPPORT AND METHOD	Issued	9548821	6513770	2/4/2/003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
PARTITIONING A DISTRIBUTED SHARED MEMORY MULTIPROCESSOR COMPUTER TO FACILITATE SELECTIVE HARDWARE MAINTENANCE	Issued	9407426	6516372	2/4/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DISCRETE DELAY LINE SYSTEM AND METHOD	Issued	9619959	6518812	2/11/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
DATA SYNCHRONIZER FOR A MULTIPLE RATE CLOCK SOURCE AND METHOD THEREOF	Issued	9409768	6529570	3/4/2003	Assignee: GENERAL ELECTRIC CAPITAL CORP. Brief: SECURITY AGREEMENT Date Recorded: Oct. 24, 2006 Reel/Frame: 018545/0777
SYSTEM AND METHOD FOR DISTRIBUTING OUTPUT QUEUE SPACE	Pensil	9409605	6532501	3/11/2003	Assignee: MORGAN STANLEY & CO., INC. Brief. SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895

Title	Status	Application No.	Patent No.	Issue Date	Unreleased Liens/Other Interests
METHOD AND SYSTEM FOR CALCULATING INTERCONNECT MOMENTS AND DELAY	Issued	9660732	6532575	3/11/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
ELECTRICALLY CONDUCTIVE PATH THROUGH A DIELECTRIC MATERIAL	lesued	9391133	6541853	4/1/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reck/Frame: 019995/0895
A METHOD AND SYSTEM FOR EFFICIENT EDGE BLENDING IN HIGH FIDELITY MULTICHANNEL COMPUTER GRAPHICS DISPLAYS	Issued	9231405	6545685	4/8/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND APPARATUS FOR DECOUPLING PROCESSOR SPEED FROM MEMORY SUBSYSTEM SPEED IN A NODE CONTROLLER	Issued	9409639	6546451	4/8/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND SYSTEM FOR DETERMINING REPEATER ALLOCATION REGIONS	Issued	9714047	6550048	4/15/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
METHOD AND SYSTEM FOR HANDLING INTERRUPTS IN A NODE CONTROLLER WITHOUT ATTACHED PROCESSORS	Issued	9409766	6564277	5/13/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
HOUSING GROUND BRACKET AND METHOD	Issued	9548497	6574121	6/3/2003	Assignce: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Recel/Frame: 019995/0895
METHOD AND APPARATUS FOR HANDLING INVALIDATION REQUESTS TO PROCESSORS NOT PRESENT IN A COMPUTER SYSTEM	Issued	10047347	6578115	6/10/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895
SYSTEM AND METHOD FOR HIGH- SPEED EXECUTION OF GRAPHICS APPLICATIONS PROGRAMS INCLUDING SHADING LANGUAGE INSTRUCTIONS	Issued	9056683	6578197	6/10/2003	Assignee: MORGAN STANLEY & CO., INC. Brief: SECURITY AGREEMENT Recorded: 10/18/2007 Reel/Frame: 019995/0895